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(71) Applicant(s)

Barry Hugh McComb
118 Spur Road, ORPINGTON, Kent, BR6 0QW,
United Kingdom

(72) Inventor(s)

Barry Hugh McComb

(74) Agent and/or Address for Service

Britter & Co
Barn West, The Dioxies, High Street, Ashwell,
BALDOCK, Hertfordshire, SG7 5NT, United Kingdom

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(54) A seal between inclined surfaces

(57) A seal for sealing between two surfaces inclined to each other, comprising first and second strips (71, 81) which are interlocatable with each other to allow relative movement therebetween, when viewed in cross-section during use, the first strip (71) having a section (74) defining a first outer surface (72) of the seal and the second strip (81) having a section (84) which at least partially overlies the first strip section (74) to define a second outer surface (85) of the seal, wherein at least one of the two strips (71, 81) comprises an additional section (91) which is securable to an adjacent surface and to which the outer surface-defining section (74, 84) of said at least one strip (71, 81) is securable, preferably detachably.

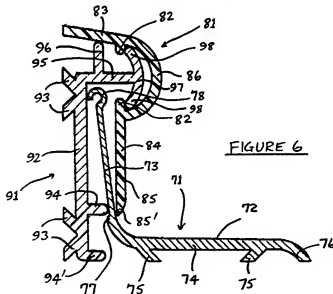


FIGURE 6

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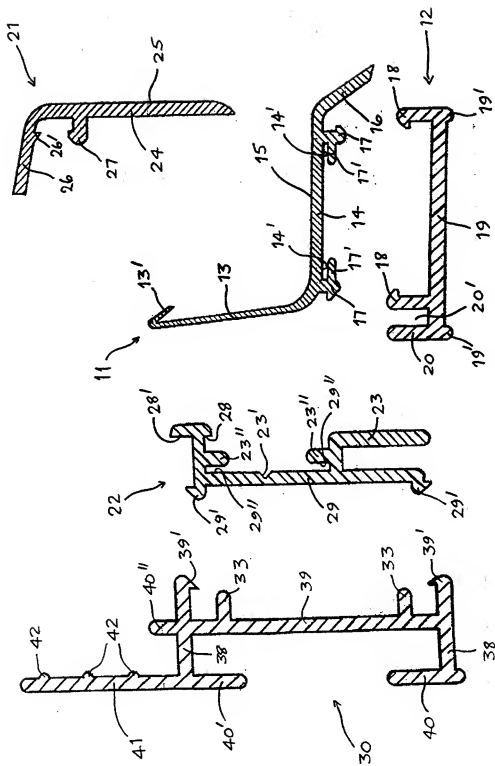


FIGURE 1

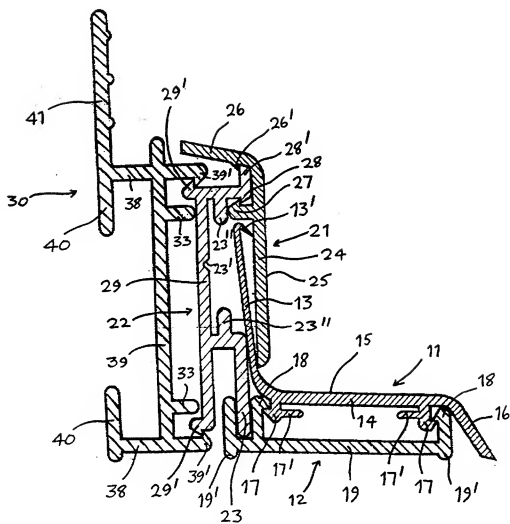
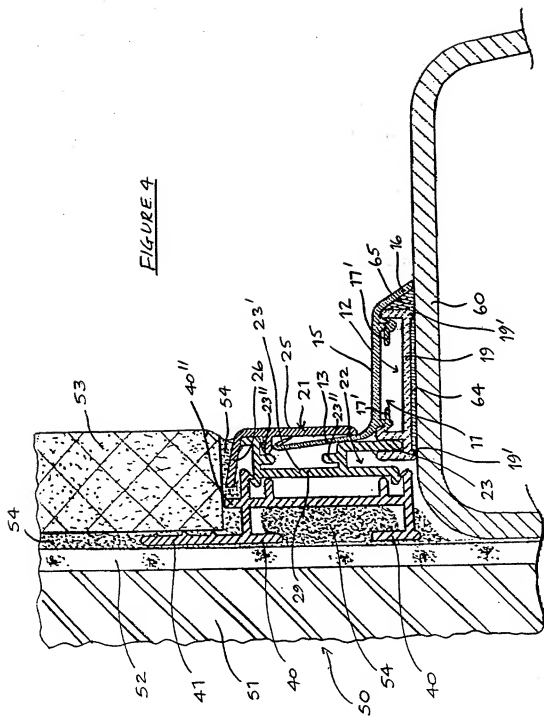


FIGURE 2

FIGURE 4



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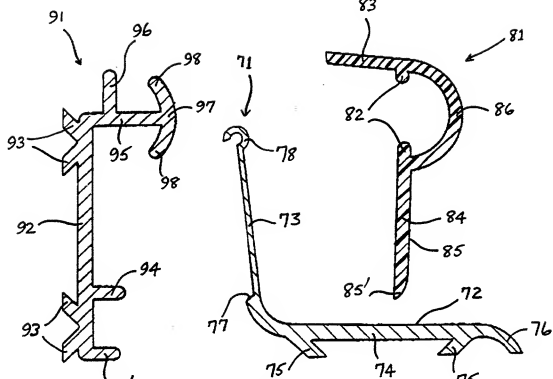


FIGURE 5

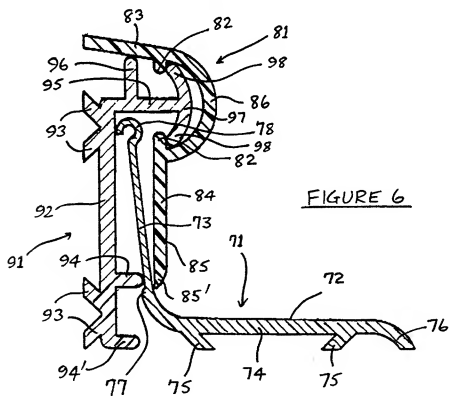
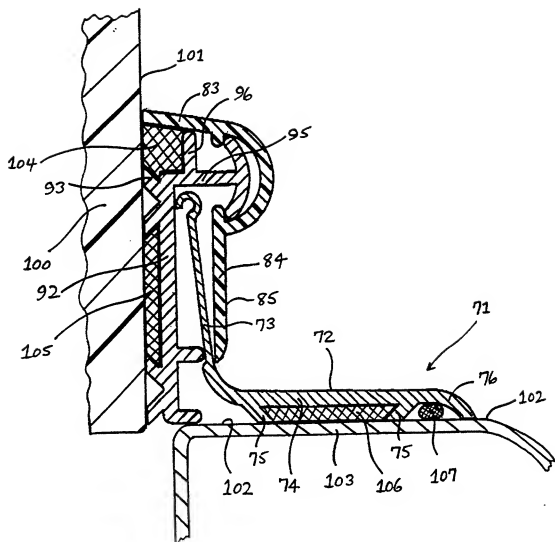


FIGURE 6

FIGURE 7

SEAL

DESCRIPTION

5 This invention relates to a seal for providing a watertight seal at a juncture between two surfaces which are inclined to each other, usually at substantial right angles to each other, and which tend to undergo relative movement. The inventive seal is especially, but not exclusively, concerned with a flexible elongate seal for application to an item of sanitaryware, such as a bath, basin or shower tray, to prevent the ingress of water between the sanitaryware item and an adjacent wall or other surface against which the item is installed. The inventive seal also has other applications where a seal, preferably a flexible elongate watertight seal, is required between two inclined surfaces, for example, between a floor and a wall, between a wall and a ceiling or between a
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15
20 worktop surface and an adjacent wall or wall tiles.

 In my co-pending British Patent Application No. 9511221.5 (Publication No. 2289924), there is disclosed a seal for sealing between two surfaces at
25 substantial right angles to each other, the seal comprising first and second preformed, liquid-impervious strips having respective interlocatable members, the first strip being generally L-shaped with its interlocatable member being constituted by one
30 limb thereof and the other limb thereof providing a first outer surface and a sealing edge, and the interlocatable member of the second strip having a surface which overlies the one limb of the first strip to form a second outer surface. In this manner, the
35 first and second outer surfaces of the assembled and

installed seal provide a gravity water run-off surface, as well as a drip strip. Also, the leading edges of the upstanding one limb of the first strip and of the surface of the other limb (drip-strip) of the second strip which overlies that one limb, may be enlarged in section by a sufficient amount to provide a contact fit with each other, so forming a sliding seal to prevent the risk of water penetrating the interior of the seal by capillary action. Those enlarged section edges can also serve to form a "clip together" action between the two strips, the purpose being to facilitate assembly, installation and adjustment of the seal with respect to the two inclined surfaces to which it is applied. Further, the two strips, when interlocated together, allow relative, usually vertical, sliding or telescopic movement by varying the degree of overlap, when seen in section. The strips may also be sufficiently flexible to allow a degree of longitudinal movement therebetween, whilst maintaining the water run-off and drip capability of the seal.

However, it has been found that, because the two strips are preformed as unitary components of the seal, difficulties can arise, in certain circumstances, in the installation of the seal, particularly with regard to the securement of the second strip to an adjacent surface, such as a wall, and the subsequent interlocation of the first strip with respect to the second strip, as well as the application of any adhesive and/or sealant between the two strips and adjacent surfaces, such as a wall and the rim of a bath.

Thus, an object of the present invention is to

provide a seal which overcomes, or at least substantially reduces, the disadvantages associated with not only the seal described above but also other known forms of elongate seals, sealing strips and the like.

Accordingly, the invention provides a seal for sealing between two surfaces inclined to each other, the seal comprising first and second strips which are interlocatable with each other to allow relative movement therebetween, when viewed in cross-section, during use, the first strip having a section defining a first outer surface of the seal and the second strip having a section which at least partially overlies the first strip section to define a second outer surface of the seal, wherein at least one of the two strips comprises an additional section which is securable to an adjacent surface and to which the outer surface-defining section of said at least one strip is securable, preferably detachably.

Preferably the so-defined first and second outer surfaces of the seal are substantially contiguous with each other, to provide an overall outer facia surface for the seal, as well as a gravity water run-off and, optionally, a drip strip therefor.

When the outer surface-defining section of the or each strip is detachably secured or securable to the additional section thereof, then a snap-fit arrangement therebetween is preferred.

In a preferred embodiment of the inventive seal to be described hereinbelow, both strips have additional sections to which their respective outer

surface-defining sections can be secured, again preferably detachably.

However, if only one of the first and second strips has such an additional section for securing it to an adjacent surface, then the second strip is preferred. This is because the second strip is normally secured to an adjacent surface, such as a wall surface, in which case, its additional section can be so-secured quite readily, before the first strip is placed in position with respect to it and adjacent its associated surface, such as the rim of a bath, for subsequent securement of the second outer surface-defining section of the second strip to that additional section, so that the respective members of the strips are interlocated, with the second outer surface-defining section of the second strip at least partially overlying the first strip section which defines the first outer surface of the seal.

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Also, when both the first and second strips have respective additional sections, then those two additional sections are preferably provided with means for positioning themselves in proper relationship with respect to each other, during and after installation of the seal. Such positioning means may comprise complementary formations on the respective additional sections. For example, a loose-fit male/female arrangement may be used, to allow for relative sectional and, optionally, longitudinal movement between the first and second strips after installation of the seal between, say, a wall and a bath rim.

The first strip preferably has an upstanding member which is interlocated or interlocatable with

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the second strip, to allow the relative movement therebetween. That interlocatable member is preferably a part of the first outer surface-defining section of the first strip and may be inserted or insertable between the second outer surface-defining section and any additional section of the second strip, to allow such lateral relative movement between the two strips after installation of the seal. The upstanding interlocatable member of the first strip may be provided, preferably at its free end, with a lip which is in sliding and wiping contact with an adjacent inner surface of the second strip, to assist in the prevention of the ingress of water into the interior of the installed seal. That adjacent surface of the second strip is preferably an inner surface of the second outer surface-defining section of that strip remote from or opposite the second outer surface defined thereby.

The first outer surface-defining section of the first strip may be provided with a lip portion, preferably remote from any upstanding interlocatable member thereof, which is arranged to engage the surface, such as the rim of a bath to which the first strip is secured, and, optionally, to provide a cover for any mastic or adhesive located thereunder.

The additional section of the at least one strip can be provided with at least one foot for spacing that section, and hence the corresponding strip(s), from the adjacent surface(s) against which the seal is installed. The so-formed space(s) between the at least one strip and adjacent surface(s) can accommodate an adhesive, such as a mastic, for sealing the corresponding strip(s) to that surface(s). Also,

the or each additional section may be provided with through holes, to allow adhesive and/or mastic to flow therethrough and, when set, to enhance the sealing effect between the seal and adjacent surfaces.

5 In one embodiment of the inventive seal, there is provided a further section to which the additional section of either the first or second strip can be attached, again preferably detachably, and which can assist in the securement of the seal to an adjacent
10 wall, particularly during tiling thereof, as will be described in more detail hereinbelow. Such a further section may be provided for each of the first and second strips of the seal.

15 Also, the inventive seal may be provided in the form of a kit of parts comprising at least:

the first and second outer surface-defining sections of respective first and second strips of the seal;

20 at least one, and preferably both, of the respective additional section therefor, as defined in accordance with the invention hereinabove; and

the further section to which the additional section of the corresponding first or second strip is
25 detachably secured or securable.

In a preferred form of such seal kit, five parts, namely the first and second outer-surface defining sections, both additional sections therefor and the
30 further section, are provided.

In this manner, when the seal is installed between, say, the rim of a bath and a wall during tiling thereof, a portion of the further section

secured to the additional section of, say, the second strip of the seal, can be located behind a row of tiles whilst they are being adhered to the wall.

5 Alternatively, when the seal is installed between, say, the rim of a bath and an existing tiled wall, then the further section can be discarded and the additional section of, say, the second strip of the seal can be adhered, or otherwise secured,
10 directly to any existing row of tiles.

 If, for instance, the seal is to be installed between a wall and floor in the region of the juncture thereof, then the kit may comprise six basic parts,
15 namely the first and second outer surface-defining sections, both additional sections therefor and two further sections to be attached to respective ones of the two additional sections, so that portions of the respective further sections can be applied behind a
20 row of wall tiles, or other wall covering, and beneath a row of floor tiles, or other floor covering, during installation thereof.

 Alternatively, one or both of the further sections can be discarded if one or both of the additional strip sections is/are to be secured directly to either an existing wall or floor covering or both.

30 The component parts of the seal are preferably extruded from a plastics material or other suitable flexible and waterproof material.

 Preferred embodiments of seal in accordance with
35 the invention will now be described by way of example

and with reference to the accompanying drawings in which:

Figure 1 is an exploded, sectional view of a
5 first embodiment of seal;

Figure 2 is a sectional view of the seal shown in Figure 1 but in an assembled condition;

10 Figure 3 is a sectional view of a second embodiment of seal installed between a tiled wall and a bath rim;

15 Figure 4 is a sectional view of the first embodiment of seal shown in Figures 1 and 2, also installed between a tiled wall and a bath rim.

Figure 5 is an exploded, sectional view of a third embodiment of seal;
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Figure 6 is a sectional view of the seal of Figure 5 in an assembled condition; and

25 Figure 7 is a sectional view of the assembled seal of Figure 6 installed between a wall and a bath rim.

Referring firstly to Figures 1 and 2 of the drawings, a first embodiment of seal comprises five
30 basic component sections 11, 12, 21, 22 and 30 each extruded from a plastics material.

The sections 11 and 12 constitute a first strip of the seal, with the section 11 having an upstanding
35 member 13 which is interlocatable with a second strip

of the seal constituted by the sections 21 and 22, as will be described in more detail hereinbelow.

5 The section 11 has a portion 14 which defines a first outer surface 15 of the seal and a further portion 16 depending downwardly at an acute angle to the portion 14 at the end thereof remote from the interlocatable member 13, to provide a lip portion.

10 Depending downwardly from either end of the portion 14 is a pair of spaced latch members 17 which are engageable with correspondingly-shaped upstanding latch members 18 on a generally planar portion 19 of the additional section 12 of the first strip of the
15 seal, to enable the two sections 11 and 12 to be detachably snap-fitted together. An upstanding member 20 at the left hand end of the portion 19 is spaced from the left hand upstanding latch member 18 to provide a slot 20' therebetween. A pair of feet 19'
20 are also provided at respective ends of the portion 19.

A portion 24 of the section 21 of the second strip of the seal defines a second outer surface 25
25 thereof. A further portion 26 of the section 21 extends at an angle to the portion 24 from the top end thereof. Latch members 27 and 26' are arranged to snap-fit together with respective latch members 28 and 28' provided on the additional section 22 of the
30 second strip of the seal.

That additional section 22 comprises a portion 29 having respective latch members 29' at either end thereof and an extended dog-leg portion 23 whose free
35 end is arranged to be received freely within the slot

20' of the additional section 12 of the first strip of the seal, to provide a loose-fitting male/female arrangement therebetween. A generally V-shaped groove 23' in the outer surface of the section portion 29, facilitates bending of that portion during installation of the seal, as well as facilitating the receipt of a fixing pin and providing a recess for accommodating the head of the fixing pin. This is particularly advantageous when the surface of a wall to which the seal is installed is uneven.

The further section 30 of the seal comprises a main portion 39 having, at respective ends thereof, outwardly-extending latch members 39' with which the latch members 29' of the section 22 are snap-fittingly engageable.

A pair of spaced members 33 project from the outer surface of the portion 39, to engage the inner surface of the portion 29 of the section 22, thus providing the required spacing between the section 22 and section 30 during and after installation of the seal.

At the ends of the portion 39, respective bridge portions 38 are connected to respective upstanding and depending portions 40 and 40', with a further portion 41 upstanding from the upper bridge portion 38. That upstanding portion 41 is provided with protrusions 42.

The seal, when assembled from the five component sections 11, 12, 21, 22 and 30, is shown clearly in Figure 2. As can be seen from that Figure, sections 11 and 12 of the first strip of the seal are snap-fitted together by means of respective latch members

17, 18. Similarly, the sections 21 and 22 of the second strip of the seal are snap-fitted together by respective latch members 27, 28 and 26', 28'.

5 The first and second strips of the seal, as constituted by respective pairs of sections 11, 12 and 21, 22, are interlocated together by the upstanding member 13 which extends between the portion 24 of the section 21 and the portion 23 of the section 22, in
10 generally sealing but sliding engagement therewith. The member 13 also extends upwardly into the space defined between the portions 24 and 29 of the two sections 21, 22 of the second strip. The downwardly depending lip 13' at the top free end of the
15 interlocated upstanding member 13 is in wiping contact with the inner surface of the portion 24 of the section 21. Also, the downwardly depending portion 23 of the section 22 is received slidably in the slot 20' between the upstanding portion 20 and the left
20 hand latch member 18 at the left hand end of the portion 19 of the section 12.

 The second strip section 22 of the seal is detachably connected to the further section 30 by
25 means of respective pairs of latch members 29', 39', whilst the outwardly projecting elements 33 on the outer surface of the portion 39 of the section 30 abut the inner surface of the portion 29 of the section 22, to provide proper positioning therebetween.

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 In Figure 4, the assembled seal is shown installed between a tiled wall, indicated generally at 50, and the rim 60 of a bath.

35 The tiled wall 50 comprises brickwork 51 or the

like, a layer 52 of plaster or the like and a row of tiles 53 of which only one is shown.

The tile 53 is secured to the plaster layer 52 by means of an adhesive 54, with the upstanding portion 41 of the further section 30 of the seal embedded in that adhesive 54 between the plaster layer 52 and the tile 53. Sufficient adhesive 54 is applied to the plaster layer 52, such that it extends between the free ends of respective upstanding and depending portions 40, 40' of the section 30 and into the space defined between the portion 39 of that section 30 and the plaster layer 52 and/or the portions 40. Further, a fixing pin may be used to enhance securement of the seal to the wall 51 or plaster layer 52, facilitated by the V-shaped groove 23' in the outer surface of the portion 29 of the section 22.

The portions 40, 40' and 41 of the section 30, as well as a further upstanding portion 40'' of the section 30, provide secure positioning of that section with respect to the plaster layer 52 and tile 53 of the tiled wall 50. At least partially embedded in the adhesive 54 beneath the lower edge of the tile 53 is the inwardly-extending portion 26 of the second strip of the seal. The first strip section 12 of the seal is spaced from the upper surface of the bath rim 60 by the pair of feet 19' and is secured to that upper surface of the bath rim 60 by means of a suitable adhesive or mastic material 64 in the space defined between the lower surface of the portion 19 and the upper surface of the bath rim 16.

A suitable mastic material 65 substantially fills the space between the right hand end of the portion 19

of the section 12, the adjacent upper surface of the bath rim 60 and the downwardly depending lip portion 16 of the section 11 of the first strip of the seal. Also, the lower free end of that lip portion 16 engages the upper surface of the bath rim 60, as well as providing a cover for the mastic material 65.

Thus, it can be seen from Figure 4 that the second strip of the seal constituted by the sections 21 and 22 are secured to the tiled wall 50, as described above, whilst the first strip of the seal constituted by the sections 11 and 12, is secured to the bath rim 60. However, the first and second strips of the seal are arranged for relative lateral (sectional), substantially vertical movement with respect to each other, due to the manner in which the two strips of the seal are interlocated with respect to each other. Such interlocation is provided by the upstanding member 13 of the first strip section 11 being vertically slidable between the two second strip sections 21 and 22, with the portion 23 being movable within the slot 20' of the first strip section 12. Thus, generally lateral sectional, vertical movement between the bath rim 60 and the tile wall 50 is accommodated by this arrangement, whilst maintaining the integrity of the seal between the bath rim 60 and wall 50. Some longitudinal, generally horizontal, relative movement between the two interlocated strips of the seal, resulting for corresponding horizontal movement between the bath rim 60 and wall 50, can also be accommodated by the seal.

In accordance with the invention, the first strip section 11 and the second strip section 21 of the seal define respective first and second outer surfaces 15,

25 which are substantially contiguous and provide a generally neat and attractive outer facia, as well as a gravity water run-off and drip strip, for the seal when so-installed between the tiled wall 50 and the bath rim 60, and any relative vertical and/or horizontal lengthwise movement therebetween, to maintain a watertight seal between the tiled wall 50 and bath rim 60.

10 Turning now to Figure 3 of the drawings, the second embodiment of seal is similar to the first embodiment described above, except that the further section 30 has been omitted.

15 In this second embodiment, the seal is provided between an existing tiled wall 50 and an adjacent bath rim 60 but with the second strip of the seal, constituted by the two sections 21 and 22, being secured by a suitable adhesive 54 directly to the outer surface of the tile 53. A space for that adhesive is provided between the inner surface of the portion 29 and outer surface of the tile 53 by means of the would-be latch members 29' acting as feet engaging that outer tile surface. Also, adhesive 54 or mastic is provided beneath the portion 26 of the section 21, which acts as a cover for that adhesive or mastic.

30 Further, fixing pins (not shown) may be used, via the V-shaped groove 23', to enhance securement of the seal to the row of tiles 53, in which case, such pins may be inserted between adjacent tiles 53, preferably in the grouting therebetween.

35 The portion 29 of the second strip section 22 of

the seal is provided with through holes (not shown) which permit the adhesive 54 to flow partially into the space between the two sections 21 and 22.

5 Similarly, adhesive or mastic 64 is also permitted to flow through holes (also not shown) in the portion 19 of the first strip section 12, as shown at 64', with mastic 64 being provided in the space defined by the space between the portion 19 and the
10 bath rim 60, which space is provided by the feet 19' resting on the bath rim.

 Again, the second strip of the seal is secured to the tiled wall 50, whilst the first strip of the seal
15 is secured to the bath rim 60, such that the first and second strips of the seal can move generally vertically (sectionally) with respect to each other, to accommodate any relative generally vertical movement between the wall 50 and the bath rim 60,
20 whilst the integrity of the seal between the wall 50 and the bath rim 60 is maintained. Again, some relative longitudinal (generally horizontal) movement between the interlocated strips of the seal can also be accommodated.

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 Further, mastic 65 fills the space defined by the right hand end of the portion 19 of the first strip section 12, the downwardly depending lip 16 of the first strip section 11 and the corresponding portion
30 of the bath rim 60, with that lip 16 acting as a cover for the mastic 65.

 The first and second outer surfaces 15 and 25 of the seal, as defined by respective sections 11 and 21
35 of the first and second strips of the seal, again are

generally contiguous with each other, to provide a neat and attractive outer facia surface for the seal, as well as a gravity water run-off and drip strip therefor.

5

In both embodiments of seal described above with respect to the accompanying drawings, and in accordance with the invention, the interlocated first and second strips of the seal are able to undergo lateral sectional, generally vertical movement with respect to each other but may also be able to accommodate any longitudinal movement therebetween, as a result of corresponding movements between the tiled wall 50 and the bath rim 60.

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Additionally, because the first and second strips of the seal are each constituted by two sections, namely, 11, 12 and 21, 22, installation of the seal is facilitated. Further, this permits different shapes and/or colours of the sections 11 and 21 of the seal to be employed or interchanged with generally standard shapes and/or colours of sections 12 and 22 of the seal.

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Ingress of water or other fluids into the interior of the seal is also prevented or at least substantially reduced, due to the sealing interlocation between the first and second strips of the seal, as well as the covered adhesive 54 and mastic 65 provided respectively by the cover portion 26 and depending lip 16, of the first strip, thereby maintaining or substantially enhancing the integrity of the installed seal.

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Further, the first outer surface-defining section

11 of the first strip of the seal has a pair of opposed flanges 17', as shown in Figure 1, which define with the adjacent lower surface of the section portion 14 a pair of spaced slots 14' for receiving therein opposed edge regions of one end of a generally L-shaped (in plan) plate (not shown) for joining together adjacent ends of two lengths of seal at right angles to each other. Such a plate may be made of any suitable material, such as a metallic or plastics material, and acts to align and reinforce the so-formed corner.

Similarly, the section 22 of the second seal strip has a pair of opposed flanges 23'', as shown again in Figure 1, which define with the adjacent outer surface of the portion 29 a pair of spaced slots 29'' for receiving therein opposed edge regions of one end of a generally L-shaped (in section) plate also not shown) for joining together adjacent ends of two lengths of seal at right angles to each other. Again, such a plate may be made of any suitable material, such as a metallic or plastics material, and acts to align and reinforce the so-formed corner.

As indicated above, the inventive seal may be provided in the form of a kit of parts comprising at least:

the first and second outer surface-defining sections 11, 21 of respective first and second strips of the seal;

at least one, and preferably both of the respective additional sections 12, 22 therefor; and

the further section 30 to which the additional section 12, 22 of the corresponding first or second strip is detachably secured or securable.

Such a kit preferably comprises five parts, namely the first and second outer-surface defining sections 11, 21, both additional sections 12, 22 therefor and the further section 30.

5

When the seal is to be installed between, say, the rim of a bath 60 and a wall 51 during tiling thereof, a portion 41 of the further section 30 can be located behind a row of tiles 53 whilst they are being
10 adhered to the wall 51 via its plaster layer 52, as in the case of the embodiment described above with reference to Figure 4.

Alternatively, when the seal is installed
15 between, say, the rim of a bath 60 and an existing tiled wall 50, as shown in Figure 3, then the further section 30 can be discarded and the additional section 22 of, say, the second strip of the seal can be adhered at 54 directly to an existing row of tiles 53.

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If, however, the seal is to be installed between a wall and floor in the region of the juncture thereof, then the kit may comprise six basic parts, namely the first and second outer surface-defining
25 sections 11, 21, both additional sections 12, 22 and two further sections 30 attached or to be attached to respective ones of the two additional sections 12, 22, so that portions 41 of the respective further sections 30 can be applied behind a row of wall tiles, or other
30 wall covering, and beneath a row of floor tiles, or other floor covering, during installation thereof.

Alternatively, one or both of the further sections 30 can be discarded if one or both of the
35 additional strip sections 22 is/are to be secured

directly to either an existing wall or floor covering or both.

Referring now to Figures 5 and 6, a third
5 embodiment of seal comprises three basic component sections 71, 81, 91 each extruded from a plastics material.

The section 71 constitutes a first strip of the
10 seal defining a first outer surface 72 of the seal and having an upstanding member 73 which is interlocatable, by engagement, with a second strip of the seal constituted by the component section 81. A
portion 84 of the second strip section 81 of the seal
15 defines a second outer surface 85 thereof. Another, generally semi-circular portion 86 of the section 81, extends from the upper region of the portion 84 and is extended by a further, generally straight portion 83. A pair of opposed inner latch members 82 are provided
20 at respective junctures between opposed ends of the portion 86 and the portions 83 and 84.

The first strip section 71 also comprises: a
portion 74 whose upper surface constitutes the first
25 outer surface 72 of the seal; a pair of downwardly inclined feet 75 at opposed ends of the portion 74; a downwardly depending lip portion 76; an inner shoulder 77 at the lower end of the upstanding member 73; and a hook-shaped portion 78 at the other, upper end of
30 the member 73.

The second section 81 of the seal is securable to the third, additional component section 91 which comprises a portion 92 having, at respective opposed
35 ends thereof, pairs of outer feet 93. At the lower

end of that portion 92 are provided two inner legs 94, 94' and at the upper end thereof, an inner arm 95 having an upwardly extending leg 96 and, at the inner end thereof, an arcuate element 97 whose opposed free ends constitute latch members 98.

In the assembled third embodiment of seal, as shown in Figure 6, the second strip section 81 is secured to the third, additional section 91 by means of a snap-fit between the latch members 98 of the arcuate element 97 and the latch members 82 of the section 81. The straight portion 83 of that section 81 is engaged by the upper free end of the leg 96 of the third section 91 preferably to provide a watertight seal therebetween. The free end of the leg 94 similarly engages the inner surface of the upstanding member 73 of the first strip section 71, adjacent the shoulder 77 thereof, whilst the lower free end of the portion 84 of the second strip section 81 engages the outer surface of the member 73 of the first strip section 71, again adjacent the shoulder 77 thereof. Further, the hook-shaped portion 78 of the first strip section 71 engages the inner surface of the portion 92 of the third, additional section 91 adjacent the upper end thereof.

In Figure 7, the assembled seal of Figure 6 is shown installed between a generally vertical surface 101 of, say, a wall or wall tile 100 and the upper surface 102 of the rim 103 of a bath.

The second and third seal sections 81, 91 are attached and sealed to the vertical wall or tile surface 101 by means of a suitable sealant adhesive or mastic 104 accommodated within the space defined by

part of the inner surface of the portion 83 of the second section 81, part of the inner arm 95, the leg 96, the uppermost foot 93 of the section 91 and the surface 101. Also, a suitable sealant adhesive or mastic 105 is provided, for such attachment, between the portion 92 of the section 91 and the vertical surface 101, intermediate the feet 93. Similarly, a sealant adhesive or mastic 106 is provided between the upper surface 102 of the bath rim 103 and the portion 74 of the first seal section 71 intermediate the feet 75 thereof, to at least partially assist in the sealing attachment of the first section 71 to the bath rim 103. Additionally, a preformed sealant adhesive strip 107, such as a butyl strip, is provided in the space defined by the foot 75 and lip 76 of the first section 71 and the upper surface 102 of the bath rim 103.

Thus, the portion 84 of the second strip section 81, which overlies the upstanding member 73 of the first strip section 71, provides a second outer surface 85 which is generally contiguous with the first outer surface 72 defined by the portion 74 of the first strip section 71, whilst the additional, third section 91 to which the second strip section 81 is secured, is secured to the adjacent vertical surface 101. Moreover, the sliding location of the upstanding member 73 of the first seal section 71 between the second and third sections 81, 91, permits relative movement therebetween, to take up any vertical and/or horizontal lengthwise movement between the wall or tile 100 and the bath rim 103 during use, whilst maintaining a watertight seal between the wall or tile 100 and the bath rim 103.

As in the case of the first two embodiments of seal described above in relation to Figure 1 to 4, the third embodiment of seal may be supplied as a kit but in three component parts, namely the three seal sections 71, 81 and 91.

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CLAIMS

1. A seal for sealing between two surfaces inclined to each other, the seal comprising first and second
5 strips which are interlocatable with each other to allow relative movement therebetween, when viewed in cross-section, during use, the first strip having a section defining a first outer surface of the seal and the second strip having a section which at least
10 partially overlies the first strip section to define a second outer surface of the seal, wherein at least one of the two strips comprises an additional section which is securable to an adjacent surface and to which the outer surface-defining section of said at least
15 one strip is securable, preferably detachably.
2. A seal according to claim 1, wherein the so-defined first and second outer surfaces of the seal are substantially contiguous with each other, to
20 provide an overall outer facia surface for the seal, as well as a gravity water run-off.
3. A seal according to claim 2, wherein the contiguous first and second outer surfaces also
25 provide a drip strip for the seal.
4. A seal according to claim 1, 2 or 3, wherein, when the outer surface-defining section of the or each strip is detachably secured or securable to the
30 additional section thereof, then such securement is provided by a snap-fit therebetween.
5. A seal according to any preceding claim, wherein both strips have additional sections to which their
35 respective outer surface-defining sections can be

secured or secured detachably.

6. A seal according to any of claims 1 to 4,
wherein, when only one of the first and second strips
5 has such an additional section for securing it to an
adjacent surface, then said only one strip is the
second strip.

7. A seal according to any of claims 1 to 5,
10 wherein, when both the first and second strips have
respective additional sections, then those two
additional sections are provided with means for
positioning themselves in proper relationship with
respect to each other, during and after installation
15 of the seal.

8. A seal according to claim 7, wherein said
positioning means comprises complementary formations
on the respective additional sections.

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9. A seal according to claim 7 or 8, wherein said
positioning means comprises a loose-fit male/female
arrangement, to allow for relative sectional and/or
longitudinal movement between the first and second
25 strips after installation of the seal.

10. A seal according to any preceding claim, wherein
the first strip has an upstanding member which is
interlocated or interlocatable with the second strip,
30 to allow relative movement therebetween.

11. A seal according to claim 10, wherein the
interlocatable member is a part of the first outer
surface-defining section of the first strip and is
35 inserted or insertable between the second outer

surface-defining section and any additional section of the second strip, to allow relative movement between the two strips after installation of the seal.

- 5 12. A seal according to claim 11, wherein the upstanding interlocatable member of the first strip is provided with a lip which is in sliding and wiping contact with an adjacent inner surface of the second strip, to assist in the prevention of the ingress of
10 water into the interior of the installed seal.

13. A seal according to claim 12, wherein the adjacent surface of the second strip is an inner surface of the second outer surface-defining section
15 of that strip remote from or opposite the second outer surface defined thereby.

14. A seal according to any preceding claim, wherein the first outer surface-defining section of the first
20 strip is provided with a lip portion which is arranged to engage the surface to which the first strip is secured.

15. A seal according to claim 14, wherein the lip
25 portion is remote from an or the upstanding interlocatable member.

16. A seal according to claim 14 or 15, wherein the lip portion also provides a cover for mastic or
30 adhesive located thereunder.

17. A seal according to any preceding claim, wherein the additional section of the at least one strip is provided with at least one foot for spacing that
35 section, and hence the corresponding strip(s), from

the adjacent surface(s) against which the seal is installed.

18. A seal according to claim 17, wherein the so-
5 formed space(s) between the at least one strip and adjacent surface(s) can accommodate an adhesive, such as a mastic, for sealing the corresponding strip(s) to that surface(s).

10 19. A seal according to any preceding claim, wherein the or each additional section is provided with through holes, to allow adhesive and/or mastic to flow therethrough and, when set, to enhance the sealing effect between the seal and adjacent surfaces.

15 20. A seal according to any preceding claim, including a further section to which the additional section of either the first or second strip is or can be attached, preferably detachably, and which assists
20 in the securement of the seal to an adjacent surface.

21. A seal according to claim 20, wherein such a further section is provided for each of the first and second strips of the seal.

25 22. A seal according to any preceding claim, wherein the component parts thereof are extruded from a flexible waterproof material.

30 23. A seal according to any preceding claim, when in the form of a kit of parts comprising at least:
the first and second outer surface-defining sections of respective first and second strips of the seal; and

35 at least one additional section therefor.

24. A seal according to claim 23, wherein the kit of parts also comprises a further section to which the additional section(s) of the corresponding first and/or second strip(s) is detachably secured or
5 securable.

25. A seal according to claim 24, wherein the kit of parts comprises five parts consisting of the first and second outer-surface defining sections, both
10 additional sections therefor and the further section.

26. A seal according to claim 23, wherein the kit of parts comprises three parts consisting of the first and second outer-surface defining sections and one
15 additional section for the second section.

27. A seal according to claim 25, wherein a portion of the further section which is securable to the additional section of the second strip of the seal,
20 can be located behind a row of tiles whilst they are being adhered to an adjacent surface.

28. A seal for providing a watertight seal at a juncture between two surfaces inclined to each other,
25 substantially as hereinbefore described with reference to the accompanying drawings.

29. An installation of a watertight seal at a juncture between two surfaces inclined to each other,
30 comprising a seal according to any preceding claim.



The
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Claims searched: 1 - 27

Examiner: Tom Sutherland
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Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.P): F2B, A4N

Int Cl (Ed.6): F16J15/02, A47K3/04, E04F19/04

Other:

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
A	GB 2289924 A (MCCOMB)	
A	US 4204376 (CALVERT)	

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
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